THE JOINT STAFF



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FY 1997

Budget Estimates

Information Technology

March 1996

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- Information Technology Support to the Joint Staff
- Support and maintain existing Automated Information Systems (AIS) within the Joint Staff.
- B. Ensure information systems supporting the Chairman and the Joint Staff utilize "state-of-the-market" technology with commercial-off-the-shelf products through well managed updates and acquisitions.
- FY97 Budget Request and Initiatives
- A. Joint Staff Automation for the Nineties (JSAN): JSAN is an acquisition and information management program which provides up-to-date office automation support to the Joint Staff. JSAN incorporates government computing standards and is targeted toward multi-level security. JSAN provides significant productivity enhancement for Joint Staff action officers, as well as Joint Staff General/Flag officers. This program will meet Joint Staff office automation requirements into the 21st century through the adoption of "open" standards and will provide a broad range of multiple systems connectivity. In FY97 we will upgrade one-third of Joint Staff Action Officer workstations, expand external electronic connectivity, continue network and server technology refreshment, consolidate and integrate corporate database structure, continue efforts to expand secure processing environment, and continue migration to Defense Messaging System environment. These initiatives will eliminate unnecessary expenditures yet continue to incorporate best business practices to enhance capability and functionality.
- B. Joint Staff Modeling and Simulation (Joint M & S): This program was previously titled Joint Staff Simulation and Modeling (JSAM). The Joint Staff Modeling and Simulation program modernizes the Joint Staff analytical capabilities with high speed computers and models using advanced programming technologies to support the Joint Staff requirements tasked under the Goldwater-Nichols Bill. These include the Joint Warfighting Capabilities Assessments (JWCAs), Chairman's Net Assessment for Strategic Planning (CNASP), Joint Military Net Assessment (JMNA), and various other force planning and budgeting analyses. This initiative reduces costs and eliminates unnecessary expenditures across DOD principles, and best business practices.
- C. Joint Warfighting Center (JWFC): This program assists the Chairman of the Joint Chiefs of Staff, commanders of the unified commands, and Chiefs of the Services in their preparation for joint and multinational operations in the conceptualization, development and assessment of current and future joint doctrine and in the accomplishment of joint and multinational training and exercise. JWFC expects 12% increase in exercise/training events in support of JCS, CINC, and Services clients. This increase in requirements will require increase support in service training and doctrine development. The overall goal is to reduce costs and eliminate unnecessary expenditures across DOD goal is to reduce costs and eliminate unnecessary expenditures across DOD principles, and best business practices

3. Budget Changes

- A. In FY 1995, the Joint Staff completed the replacement of the antiquated and proprietary WANG network with a "state of the market" local area network (LAN). A significant amount of FY 1995 expenditures were for the LAN backbone, infrastructure, and hardware. Successive fiscal year requirements reflect the expansion of LAN connectivity, upgrading network components, upgrading one-third of all workstations each fiscal year, and replacing all remaining legacy equipment. In FY 1995, the Joint Staff completed the acquisition of COTS software components for the new 1,500 workstation JSAN network. Personnel cost increased in FY95 because the DOM/JSIRMO network management personnel are included in the total. This shift is being phased in over four years, starting in FY 95. Additionally, the DOM/JSIRMO telecommunication personnel are shifting from Pentagon Telecommunication Center (PTC) support to supporting automated messaging on the JSAN network. The gradual increase in personnel cost reflects this phased approach. Joint Staff MILPERS is budgeted for in individual Service budgets.
- B. The major changes in the FY96 budget are found in the Joint Staff Automation For The Nineties (JSAN) arena. Beginning FY 1996, new COTS software applications requirements have decreased significantly because the preponderance of the infrastructure is in place. However, the Joint Staff

The Joint Staff Information Technology Exhibit FY 1997 Budget Estimates

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will experience significant increases in external electronic connectivity requirements.

C. Major change in the FY97 budget is JWFC funding. JWFC accepted greater responsibility in joint warfighting doctrine and training development in support of the Commission on Roles and missions (CORM) recommendations. Therefore, JWFC's budget was increased. Additionally, JSAN budget will receive an additional \$3 million in FY97 for unfunded requirements. Additionally in consonance with the National Performance Review and the Defense Performance Review, FY97 funds for non-centrally procured items have migrated to the Joint Staff Operation and Management (O&M) account.

Joint Staff

Report on Information Technology (IT) Resources

FY 1997 Budget Estimates (Dollars in Thousands)

Regulament A. Capital Purchases B. Purchases/Leases C. Software A. Capital Purchases A. Capital Purchases B. Purchases/Leases C. Software A. Capital Purchases B. Purchases/Leases C. Software A. Capital Purchases B. Purchases/Leases C. Software A. Camminications C. Communications C. Other C.			FY 1995	FY 1996	FY 1997
B. Purchases/Leases		Equipment	12 404	0 012	9 300
Subtotal 13,494 9,912 9,300					
2. Software				-	
A. Capital Purchases	•		13,494	9,912	9,300
B. Purchases/Leases Subtotal Services A. Communications A. Communications B. Processing A. Communications B. Processing C. Other Subtotal A. Software B. Equipment Maintenance C. Other B. Software B. Equipment Maintenance C. Other C. Other B. Software B. Equipment Maintenance C. Other C. Other B. Equipment Maintenance C. Other C. Processing C. Other C. P	4.		0	0	0
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B. Processing	٥.		72	199	204
C. Other Subtotal 72 199 204 4. Support Services A. Software 24,928 27,861 28,994 B. Equipment Maintenance 3,225 2,391 2,011 C. Other 6,898 10,041 10,968 Subtotal 35,051 40,293 41,973 5. Supplies 6. Personnel (Compensation/Benefits) A. Software 0 0 0 0 0 0 B. Equipment Maintenance 0 0 0 0 0 C. Other 0 0 0 0 0 D. Communications 0 0 0 0 0 E. Other 5,052 5,044 5,054 Subtotal 5,052 5,044 5,054 7. Other (Non-FIP Resources) A. Capital Purchases 0 0 0 0 0 B. Other Current 0 0 0 0 0 B. Equipment Maintenance 0 0 0 0 0 B. Other Current 0 0 0 0 0 B. Other Current 0 0 0 0 0 B. Equipment Maintenance 0 0 0 0 0 C. Processing 0 0 0 0 0 D. Communications 0 0 0 0 0 0 D. Communications 0 0 0 0 0 0 D. Communications 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0	0	0
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D. Communications			0	0	0
E. Other Subtotal 5,052 5,044 5,054 Subtotal 5,052 5,044 5,054 7. Other (Non-FIP Resources) A. Capital Purchases 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0	0	0
Subtotal 5,052 5,044 5,054			5,052	5,044	5,054
7. Other (Non-FIP Resources) A. Capital Purchases			5,052	5,044	5,054
A. Capital Purchases B. Other Current Subtotal Communications A. Software B. Equipment Maintenance C. Processing C. Other Subtotal C. Processing C. Proces	7.	Other (Non-FIP Resources)			
B. Other Current 0 0 0 0 0 0 0 0 Subtotal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0	0	0
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A. Software B. Equipment Maintenance C. Processing D. Communications E. Other Subtotal O Subtotal C. Processing D. Communications E. Other O Subtotal O O O O O O O O O O O O O		Subtotal	0	0	0
B. Equipment Maintenance 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8.	Intra-Governmental Payments			
C. Processing D. Communications E. Other Subtotal A. Software B. Equipment Maintenance C. Processing D. Communications A. Software B. Equipment Maintenance C. Processing D. Communications E. Other Subtotal NET IT RESOURCES Workyears Non-DBOF D. Communications 10 10 11 11		A. Software	0	0	0
D. Communications 0 0 0 0 0 0 E. Other 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		B. Equipment Maintenance	0	0	0
E. Other Subtotal O O O O O O O O O O O O O O O O O O		C. Processing	0	0	0
Subtotal 0		D. Communications	. 0	0	0
9. Intra-Governmental Collections A. Software B. Equipment Maintenance C. Processing D. Communications E. Other Subtotal NET IT RESOURCES Workyears Non-DBOF 10 0 0 0 0 0 0 0 0 0 0 0 0		E. Other	0	0	0
A. Software B. Equipment Maintenance C. Processing D. Communications E. Other Subtotal NET IT RESOURCES Workyears Non-DBOF O 0 0 0 0 0 0 0 0 0 0 0 0		Subtotal	0	0	0
## B. Equipment Maintenance C. Processing D. Communications E. Other Subtotal NET IT RESOURCES Workyears Non-DBOF ### Description 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.	Intra-Governmental Collections			
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D. Communications E. Other Subtotal NET IT RESOURCES Workyears Non-DBOF D. Communications 0 0 0 0 0 0 0 0 10 11 11		B. Equipment Maintenance	0	_	_
E. Other Subtotal NET IT RESOURCES Workyears Non-DBOF D O O O O O O D 10 11 11 11 11 11 11 11 11		C. Processing	0		•
Subtotal 0 0 0 NET IT RESOURCES 54,259 55,748 56,856 Workyears 10 10 11 Non-DBOF 10 10 11		D. Communications		_	_
NET IT RESOURCES 54,259 55,748 56,856 Workyears 10 10 11 Non-DBOF 10 10 11					
Workyears 10 10 11 Non-DBOF 10 10 11		Subtotal			
Non-DBOF 10 11		NET IT RESOURCES	54,259	55,748	56,856
		Workyears	10	10	11
DBOF 0 0 0		Non-DBOF	10	10	11
		DBOF	0	0	0

Joint Staff Report on Information Technology (IT) Resources FY 1997 Budget Estimates (Dollars in Thousands)

App	propriation/Fund	FY 1995	FY 1996	FY 1997
0100	O&M, Def-Wide	35,713	40,792	51,802
0300	Proc, Def-Wide	13,494	9,912	0
1105	Mil Pers, MC	348	348	349
1453	Mil Pers, Navy	1,349	1,346	1,350
2010	Mil Pers, Army	1,658	1,655	1,657
3500	Mil Pers, AF	1,697	1,695	1,698
T	otal By Appropriation:	54,259	55,748	56,856

NOTE 1: Military Personnel Cost in the DBOF is computed at the equivalent civilian rate as prescribed by the DBOF Guidance.

NOTE 2: FY 1995 estimates reflect a \$50 thousand investment/expense threshold, FY 1996 reflects a \$100 thousand investment/expense threshold as adjusted by Congress (Section 8065 in Public Law 104-61), and for FY 1997, appropriated funds will adhere to the centrally managed criteria in that the Department will budget for the purchase of noncentrally managed items (by definition installation/local level type items) in the O&M appropriation regardless of the unit cost of the item. DBOF will maintain the \$100 thousand threshold for FY 1997 and beyond.

DEPARTMENT OF DEFENSE

Joint Staff

Information Technology Resources by CIM Functional Area FY 1997 Budget Estimates

(Dollars in Thousands)

	FY 1995	FY 1996	FY 1997
A. Core DII - Computing			
1. Major Systems/Initiatives			
2. Non-Major Systems/Initiatives			
Joint Modeling and Simulation	1,325	1,373	1,318
Development/Modernization	7,661	8,611	6,849
Current Services	8,986	9,984	8,167
Subtotal	0,900	9,304	0,10,
Appropriation/Fund O&M, Def-Wide	6,908	7,849	7,407
	1,325	1,373	0
Proc, Def-Wide	52	53	53
Mil Pers, MC	201	203	203
Mil Pers, Navy	247	250	249
Mil Pers, Army	253	2 56	255
Mil Pers, AF 3. All Other Core DII - Computing	255	200	
	1,325	1,373	1,318
Development/Modernization	7,661	8,611	6,849
Current Services	8,986	9,984	8,167
Subtotal	8,980	J, J04	0,10,
Appropriation/Fund O&M, Def-Wide	6,908	7,849	7,407
Proc, Def-Wide	1,325	1,373	0
Mil Pers, MC	52	53	53
Mil Pers, Navy	201	203	203
Mil Pers, Army	247	250	249
Mil Pers, AF	253	256	255
B. Core DII - Other			
1. Major Systems/Initiatives			
JWFC			
Development/Modernization	2,784	695	1,259
Current Services	20,599	23,626	26,670
Subtotal	23,383	24,321	27,929
Appropriation/Fund			
O&M, Def-Wide	18,831	21,840	26,148
Proc, Def-Wide	2,784	695	0
Mil Pers, MC	122	123	123
Mil Pers, Navy	472	477	476
Mil Pers, Army	580	586	584
Mil Pers, AF	594	600	598
2. Non-Major Systems/Initiatives			
All Other Core DII - Other			
Development/Modernization	2,446	1,196	1,767
Current Services	2,845	2,765	2,951
Current pervices	2,	-, -	-

DEPARTMENT OF DEFENSE Joint Staff

Information Technology Resources by CIM Functional Area FY 1997 Budget Estimates

(Dollars in Thousands)

	FY 1995	FY 1996	FY 1997
Subtotal	5,291	3,961	4,718
Appropriation/Fund			
O&M, Def-Wide	2,770	2,689	4,642
Proc, Def-Wide	2,446	1,196	0
Mil Pers, MC	5	5	5
Mil Pers, Navy	20	20	20
Mil Pers, Army	25	25	25
Mil Pers, AF	25	26	26
4. Total Core DII - Other			
Development/Modernization	5,230	1,891	3,026
Current Services	23,444	26,391	29,621
Subtotal	28,674	28,282	32,647
Appropriation/Fund			
O&M, Def-Wide	21,601	24,529	30,790
Proc, Def-Wide	5,230	1,891	. 0
Mil Pers, MC	127	128	128
Mil Pers, Navy	492	497	496
Mil Pers, Army	605	611	609
Mil Pers, AF	619	626	624
Core DII - Value Added Services			
Major Systems/Initiatives			
2. Non-Major Systems/Initiatives			
Joint Staff Automation for the Nineties			
Development/Modernization	6,939	6,648	4,956
Current Services	9,660	10,834	11,086
Subtotal	16,599	17,482	16,042
Appropriation/Fund			
O&M, Def-Wide	7,204	8,414	13,605
Proc, Def-Wide	6,939	6,648	0
Mil Pers, MC	169	167	168
Mil Pers, Navy	656	646	651
Mil Pers, Army	806	794	799
Mil Pers, AF	825	813	819
3. All Other Core DII - Value Added Services			
4. Total Core DII - Value Added Services			
Development/Modernization	6,939	6,648	4,956
Current Services	9,660	10,834	11,086
Subtotal	16,599	17,482	16,042
Appropriation/Fund		0.444	12 605
O&M, Def-Wide	7,204	8,414	13,605
Proc, Def-Wide	6,939	6,648	160
Mil Pers, MC	169	167	168
Mil Pers, Navy	656	646	651
Mil Pers, Army	806	794	799

DEPARTMENT OF DEFENSE

Joint Staff

Information Technology Resources by CIM Functional Area FY 1997 Budget Estimates

(Dollars in Thousands)

	FY 1995	FY 1996	FY 1997
Mil Pers, AF	825	813	819
CIM Grand Total			
Development/Modernization	13,494	9,912	9,300
O&M, Def-Wide	0	0	9,300
Proc, Def-Wide	13,494	9,912	0
Current Services	40,765	45,836	47,556
O&M, Def-Wide	35,713	40,792	42,502
Mil Pers, MC	348	348	349
Mil Pers, Navy	1,349	1,346	1,350
Mil Pers, Army	1,658	1,655	1,657
Mil Pers, AF	1,697	1,695	1,698
Total	54,259	55,748	56,856
Appropriation/Fund			
O&M, Def-Wide	35,713	40,792	51,802
Proc, Def-Wide	13,494	9,912	. 0
Mil Pers, MC	348	348	349
Mil Pers, Navy	1,349	1,346	1,350
Mil Pers, Army	1,658	1,655	1,657
Mil Pers, AF	1,697	1,695	1,698

- A. AIS Title and Number:
 Joint Staff Automation for the Nineties (JSAN)
- B. CIM Functional Area: Core DII - Value Added Service
- C. Approved Life Cycle Cost and Program Cost:
 - 1. Then year (Inflated) dollars

 Approved Life-cycle cost: \$ 97.9 (in millions of dollars)

 Estimated Life-cycle cost: \$ 97.9 (in millions of dollars)

 Approved Program cost: \$ 55.6 (in millions of dollars)

Approved Program cost: \$ 55.6 (in millions of dollars)
Estimated Program cost: \$ 55.6 (in millions of dollars)

2. Constant base year (FY 1990) dollars

Approved Life-cycle cost: \$ 84.4 (in millions of dollars)

Estimated Life-cycle cost: \$ 84.4 (in millions of dollars)

Approved Program cost: $$\frac{47.5}{0}$$ (in millions of dollars) Estimated Program cost: $$\frac{47.5}{0}$$ (in millions of dollars)

3. Sunk Cost (actual): \$ 36.1 (in millions of dollars) 4. Cost to Complete: \$ 61.8 (in millions of dollars)

D. Cross reference to Justification books: The resources described under this AIS are in the Committee Staff Operation & Maintenance Backup Book, FY 1997 Budget Submission, March 1996, Exhibit OP-5 Part 3 BA-4(subactivity group: Management Support and ADP Software Maintenance and Development); Committee Staff Procurement Backup Book, FY 1997 Budget Submission, March 1996, Exhibit P-5, line 10 and Exhibit P-5A.

E. System Description:

JSAN will satisfy mandatory headquarters office automation support requirements such as local area networking, word processing, electronic mail, data base applications, graphics, and spreadsheet capabilities. In addition, JSAN provides new capabilities such as external connectivity, mapping, automated workflow processing, and other specialized processing functions. JSAN maintains currency with technology advancements by requiring contractor to implement a technology refreshment program during and after deployment process. JSAN will ultimately provide a migration path to a multi-level secure environment for information processing. This is a major improvement over the previous system which requires all operations to be performed at the TOP SECRET level. JSAN will, also, incorporate government computing requirements such as standardization, integration, and interoperability with other automated information systems. Capability gains associated with "open systems", commercial standardization and multi-level secure processing provide the foundation for Joint Staff Action Officers to use JSAN at productivity levels far beyond traditional proprietary office systems.

F. Program Accomplishments and Plans:

1. FY 1995 Accomplishments: Completed the replacement of all remaining Wang Intel 286/386-based workstations with Intel 486/66 and Pentium/90-based workstations. Installed a corporate database server and began conversion of legacy corporate databases. Completed conversion of the

Comptroller's Automated Budget System (CABS). Installed a graphics and desktop publishing local area network. Installed the Action Tracking System (ATS) and the Excalibur File System, two of the three major components of the Joint Staff Action Processing System (JSAP). Began integration of automated workflow software, a commercial-off-the-shelf (COTS) application, the third major component of JSAP. Integrated and installed the Joint Staff Automated Messaging System (JSAMS), which replaced the legacy Joint Staff Support Information System (JSSIS) Message Handler (JMH).

- 2. FY 1996 Planned Program: Plan to upgrade approximately one-third of all Joint Staff Action Officer workstations from Intel 486/66-based workstations to Pentium/133-based workstations, to include new and more capable peripherals (printers, scanners, CD-ROMs, etc). Plan to establish external connectivity to the Secret Internet Protocol Router Network (SIPRNET). Plan to change existing Top Secret FDDI backbone from a router based architecture to an architecture based on Switched Ethernet technology to improve network performance in anticipation of additional bandwidth requirement during FY 1996 from the implementation of automated workflow processing and the installation of a geographical mapping server. Plan to install an unclassified FDDI backbone and Ethernet subnetwork infrastructure to enhance connectivity to the unclassified Internet Protocol Router Network (NIPRNET/Internet). Plan to explore technologies supporting telecommunications connections to external LANs and to implement video to the desktop and distributed collaborative video teleconferencing. Initial Multilevel secure computing will be introduced through the implementation of Personal Computer (PC) card readers and Fortezza card technologies, part of the NSA Multi-Level Information System Security Initiative (MISSI) Program. Plan to continue efforts to prepare for migration to Defense Message System.
- 3. FY 1997 Planned Program: Plan to upgrade approximately one-third of all Joint Staff Action Officer workstations from Intel 486/66-based, Pentium/90-based, or Pentium/133-based workstations to Pentium/200-based workstations, to include new and more capable peripherals (printer, scanner, CD-ROMs, etc). Plan to continue efforts to expand external connectivity. Plan to continue network and server technology refreshment. Plan to continue efforts to consolidate and integrate corporate database structure. Plan to continue efforts to expand multi-level security processing environment through the implementation of additional PC card readers and Fortezza cards. Plan to migrate to Defense Messaging System.

G. Contract Information:

The JSAN contract was awarded to CONTEL Federal Systems in December 1991. On 20 November 1992, JSAN contract award to CONTEL Federal Systems was reconfirmed by the General Services Board of Contract Appeals (GSBCA) in response to a contract protest by a competing vendor. On 26 January 1994, the Court of Appeals for the Federal Circuit further upheld the JSAN contract award. The JSAN contractor's new name is GTE Government Systems Corporation, resulting from the acquisition of CONTEL Federal Systems and GTE and the subsequent novation agreement.

- H. Comparison with FY 1995 Description Summary:
- 1. Technical Changes: The originally conceived networked workstations configuration was based upon a homogeneous environment of IBM Reduced

Instruction Set Computing (RISC) System/6000 Model 2xx, 5xx, and 9xx platforms. However, the Joint Staff was unable to implement this due to problems encountered with the Compartment Mode Workstation (CMW) during the NSA evaluation process and due to problems encountered during the Joint Staff's Security Test and Evaluation (ST&E) testing. After the announcement of a two-year slip in the evaluation process, the Joint Staff made a business decision to not put approximately \$22.5M at risk and instead pursued an interim solution (Interim-JSAN, or I-JSAN) to replace the proprietary and aging capabilities of the legacy Wang system. The interim architecture is based on DEC Alpha servers running the Microsoft Windows New Technology Server (WindowsNT Server) operating system with a mixture of Intel-based 486/66 and Pentium/90 workstations running the WindowsNT operating system and Microsoft Office suite of COTS applications (e.g., Word, Mail, PowerPoint, Excel, Schedule+, and Access). The implementation of I-JSAN was facilitated by a Value Engineering Change Proposal (VECP) submitted by the JSAN Contractor. Consequently, the Government split the cost savings of approximately \$1.8M with the Contractor.

- 2. Schedule Changes: The protest by a competing vendor, which resulted in an approximate one year delay for the GSBCA and the CAFC to uphold the award to Contel/GTE, along with the problems encountered with the CMW in the NSA evaluation process, resulted in an approximate two year delay from the originally planned implementation schedule. The revised schedule provided an aggressive implementation plan to transition the entire Joint Staff (approximately 1,500 users) to I-JSAN by 15 December 1994--approximately three years ahead of the schedule for implementing the original configuration.
- 3. Cost Changes: As a result of being unable to obligate funds at previously programmed and funded rates due to the Joint Staff's inability to acquire CMWs due to the problems attributed to the CMWs in the NSA evaluation process and Joint Staff ST&E testing, the JSAN Program suffered significant out-year funding cuts. Although the cost of implementing I-JSAN was significantly less than the anticipated cost of the previously planned configuration, the requirement to maintain technological currency remains. The FY95 budget was increased from other existing programs in the year of execution to cover unfunded requirements. FY96 and FY97 funding was increased due to manning increase. Additionally, FY97 budget requests were increased based on the high priority of the JSAN system.

- A. AIS Title and Number:
 Joint Staff Modeling and Simulation (Joint M & S)
- B. CIM Functional Area: Core DII - Computing
- C. Approved Life Cycle Cost and Program Cost:
 - 1. Then year (Inflated) dollars

 Approved Life-cycle cost: \$ 187.0 (in millions of dollars)

 Estimated Life-cycle cost: \$ 187.0 (in millions of dollars)

Approved Program cost: \$\ 28.8 \text{ (in millions of dollars)}\$\$ Estimated Program cost: \$\ 28.8 \text{ (in millions of dollars)}\$\$

2. Constant base year (FY 1990) dollars

Approved Life-cycle cost: \$ 176.0 (in millions of dollars)

Estimated Life-cycle cost: \$ 176.0 (in millions of dollars)

Approved Program cost: \$\frac{27.3}{27.3}\$ (in millions of dollars)

Estimated Program cost: \$\frac{27.3}{27.3}\$ (in millions of dollars)

- 3. Sunk Cost (actual): \$ 141.8 (in millions of dollars)
- 4. Cost to Complete: \$ N/A (in millions of dollars)

D. Cross reference to Justification books: The resources described under this AIS are in the Committee Staff Operation & Maintenance Backup Book, FY 1997 Budget Submission, March 1996, Exhibit OP-5 Part 3 BA-4 (subactivity group: Management Support and ADP Software Maintenance and Development); Committee Staff Procurement Backup Book, FY 1997 Budget Submission, March 1996, Exhibit P-5, lines 4 & 5 and Exhibit P-5A.

E. System Description:

- 1. The Joint Modeling and Simulation program consists of two components: the modernization and operation of hardware (computer systems, network, routers, etc.) and the development, modernization, and maintenance of the specialized software tools and models required to produce the various assessments in fulfillment of modeling and simulation support to the Chairman of the Joint Chiefs of Staff, and the Joint Staff.
- 2. Hardware Modernization: Consists of sound structure, reliability and responsive computational power to support modeling and simulation models of the Joint Staff and CINCs. Declining manpower ceilings, increased analytical complexities, and increased reliance on modeling and simulation to support decisions and activities of national perspective necessitate increased capabilities and effectiveness with state-of-the-art systems.
- 3. Software and Model Modernization: Provides ongoing development and modernization of modeling and simulation tools producing necessary functionalities and responsiveness needed to support the Joint Staff and CINC operations. This effort includes development of new modeling and simulation methodologies, integration of modeling tools, evolutionary refinement of existing capabilities and enrichment of common data sharing technologies.

F. Program Accomplishments and Plans:

- 1. FY 1995 Accomplishments: Established E-mail bridge between the Joint Staff Analytical Suite network and the JSAN network, surveyed and established internal site locations for the integration of the Distributed Analysis Decision Support System with the Joint Staff Analytical Suite Network, made a major upgrade to the uninterrupted power support system within the joint integrated/coordinated analytical capability to evaluate strategic and operational requirements.
- 2. FY 1996 Planned Program: Upgrade of network to include CD-ROM capabilities (jukebox configuration), GCCS connectivity, multi-level security on the Sequent machines, connectivity with the CINCs through gateways. Installation of secure Ingres/ptx.
- 3. FY 1997 Planned Program: Upgrade of Analytical Networking continue with emphasis on distributed, collaborative analysis requiring an electronic interactive environment in all CINCs and the Joint Staff. Requirements include local and long distance interactive desktop multimedia televisual conference capability with simultaneous use of analytical capabilities including mathematical modeling and operational analysis. This concept requires the Joint Analytical Model to portray critical resource usage as well as operational needs.

G. Contract Information:

- 1. Hardware Modernization. A dedicated J-8 Directorate hardware procurement contract does not exist. J-8 utilizes Defense Supply Services-Washington as its procurement contracting office to obtain needed hardware via GSA schedule or direct acquisition.
- 2. Software and Model Development. Several contracts exist to support this component. General technical support is provided by Potomac Systems Engineering under MDA903-90-D-0005. Wargaming and Simulation Analysis is performed by Booz-Allen and Hamilton under MDA903-90-C-0006. Database management, technical, developmental, and modeling and simulation support is provided by Westinghouse under MDA903-91-D-0038. Additional developmental support is obtained through the Department of Energy (primarily Argonne and Los Alamos National Laboratories) under Interagency agreement #1950-1612-Al. As these contracts expire, new contracts are being prepared and awarded by the Defense Supply Services-Washington.

H. Comparison with FY 1995 Description Summary:

- Technical Changes: Upgraded uninterrupted power distribution system for the Joint Staff Analytical network. Upgrade various software programs to reflect current releases and analysis issues.
- Schedule Changes: Changed priorities to reflect the need to coordinate/integrate internal analysis on the Joint Staff with the Unified Commands.
- 3. Cost Changes: Funding decreases are response to internal reprogramming actions driven by OSD directed cuts. Due to ongoing nature of the Joint Modeling and Simulation program, cost to complete is "not-applicable".

- A. AIS Title and Number:
 Joint Warfighting Center (JWFC)
- B. CIM Functional Area: Core DII - Other
- C. Approved Life Cycle Cost and Program Cost:
 - 1. Then year (Inflated) dollars

Approved Life-cycle cost: \$ 96.9 (in millions of dollars) Estimated Life-cycle cost: \$ 96.9 (in millions of dollars)

Approved Program cost: \$\frac{7.6}{5.6}\$ (in millions of dollars)

Estimated Program cost: \$\frac{7.6}{5.6}\$ (in millions of dollars)

2. Constant base year (FY 1990) dollars

Approved Life-cycle cost: \$84.3 (in millions of dollars)
Estimated Life-cycle cost: \$84.3 (in millions of dollars)

- 3. Sunk Cost (actual): \$ 43.19 (in millions of dollars)
 4. Cost to Complete: \$ N/A (in millions of dollars)
- D. Cross reference to Justification books: The resources described under this AIS are in the Committee Staff Operation & Maintenance Backup Book, FY 1997 Budget Submission, March 1996, Exhibit OP-5 Part 3 BA-01 (Subactivity group, JWFC); Committee Staff Procurement Backup Book, FY 1997 Budget Submission, March 1996, Exhibit P-5, line 8 and Exhibit P-5A.

E. System Description:

The JWFC's mission is to support and assist the Chairman of the Joint Chiefs of Staff, Commanders of the Unified Commands, and Service Chiefs in their preparation for joint and multinational operations. This preparation includes conceptualization, development and assessment of current and future joint doctrine and in the accomplishment of joint and multinational training and exercises. The JWFC uses state-of-the-art warfare simulations and secure communications to support both on-site and user home station training via distributed audio, video, and data networking. The warfare simulations operate on a multitude of computer hardware platforms ranging from minimainframe computers to workstations. The simulations provide the stimulus needed for joint and interoperability staff training at the Joint Task Force level and above. The budget for fiscal 1996 and beyond will increase to account for normal ADP equipment considerations of the Center, and for the expanded mission requirements and responsibilities of the command. Fiscal year 1994 studies conducted by the Vice Director of the Operational Plans and Interoperability Directorate (VJ-7) were revised in mid-year to adjust for the new mission and accentuation of the command. The command has a two star level Commander as directed by the Chairman, Joint Chiefs of Staff.

F. Program Accomplishments and Plans:

- 1. FY 1995 Accomplishments. The JWFC supported fifteen exercises CINC clients during fiscal year 1995 at a variety of locations to include Europe, Hawaii, Japan, Thailand, Korea, Panama, and multiple CONUS locations. The JWFC also served as the proponent for Joint Training Simulations, represented the CINCs, and was directed to be the Joint Staff Executive Agent for the Joint Simulation Systems.
- 2. FY 1996 Planned Program: JWFC plans to support twenty-two exercises during the fiscal year using distributed simulations, and interactive computing technologies. Training and doctrine development capabilities will continue to be enhanced during this year to achieve full operational capability. Full capabilities will be achieved and will support Joint Training for CINC/JTF staffs and Joint Doctrine Development leveraging of synthetic environments. The JWFC will continue as the proponent for Joint Training Simulations, represent the CINCs, and be the Joint Staff Executive Agent for the Joint Simulation System.
- 3. FY 1997 Planned Program: JWFC plans to support full service training, doctrine development and exercise events using state-of-the art facilities and automated technologies. The command expects to support twenty-five exercise/training events in support of JCS, CINC, and Services clients. The JWFC will continue as proponent of Joint Training Simulations, represent the CINCS, and be the Joint Staff Executive Agent for the Joint Simulation System.

G. Contract Information:

The current general support contractor (Veda Incorporated) and its subcontractor (Sterling Software Inc.) provide full range of technology support functions in the areas of computer systems management, computer operations, simulation operations, logistics operations, telecommunications engineering, exercise support and simulation design and development. The general support contract will be reaccomplished in fiscal year 1996. services of Cubic Applications Incorporated is used for training preparations and support, exercise after action review support, a professional free thinking Opposing Forces (OPFOR) group, and simulation instructional planning services. The operations and training support provided by Cubic Applications Incorporated in fiscal year 1995 will be integrated into the new general support contract requirements. Also, computer simulation and distributed exercise technology support is received from Rolands and Associates under a separate JWFC contract, and Lawrence Livermore Laboratory on a fee for hire basis to debug, enhance, and adapt joint coalition models, JTLS and JCM. Doctrine Division is supported by OC Incorporated under contractual arrangement with Joint Doctrine Division of J-7. In fiscal year 1996, the doctrine support will be reaccomplished under a separate JWF contract action and will longer rely on the Joint Doctrine Division of J-7. Additional, MITRE Corporation provides C4I research, planning, and task engineering support to the JWFC under a contractual agreement with US Army's CECOM. MITRE provides objective technical assessment and review of C41 systems and capabilities, assess future telecommunication plans, reviews contractor deliverables, and assists in developing new distributed computer simulation concepts and techniques beyond the scope of the general support contracts.

H. The Comparison with FY 1995 Description

The JWFC Vision and Mission statement were revised and reissued in early fiscal 1994 to include a broadened mission responsibility. This required the recapitalization of Command AIS computer systems to create a world-class distributed simulation capability, the expansion of the staff, and a significant increase in computer support. In fiscal year 1995, the Chairman directed that the JWFC's mission be further broadened to include Peacekeeping doctrinal support and oversight of DoD's Modeling and Simulation Coordination Center. The relocation to FT Monroe, VA of all the staff and associated resources has been completed, but refurbishing of some occupied facilities will not be finished until fiscal year 1996. Meanwhile, the Center will continue to provide customer requested exercise, training and doctrine support while the facilities renovation are being completed.

1. Technical Changes: None

2. Schedule Changes: None

3. Cost Changes: Cost increases from the previous year (FY 1996) budget submission: Additional funding was provided to and now requested (for FY 97) for the JWFC in all FYs 1995-1997. These deltas specifically support the recommendations of the Commission on Roles and Missions (CORM) of the Armed Forces (also titled "Directions for Defense", May 24, 1995). Joint training and doctrine -- the JWFC's core missions -- were prevalent themes throughout the CORM. Specifically, the CORM recommended:

"Emphasis on joint training throughout DoD must be increased. To this end, we recommend that joint training be fully funded in DoD's budget and that the Commanders in Chief (CINCs) be given more control over the portions of Service component training budgets that are integral to joint training ... The CINCs also need improved simulation techniques, more rigorous training readiness standards, and better tools for conducting and evaluating joint training."

This increased funding supports the specific CORM initiative to "... provide the money necessary for the Joint Warfighting Center." At the previously stated funding levels the JWFC could not perform its mission as further emphasized by the CORM. The increased level of funding will provide for enhanced support to the Unified Commanders (CINCs), allowing JWFC to conduct additional major exercises supporting CINC training programs by developing, coordinating, and executing new joint training modeling and simulation tools via the Joint Training Simulation Plan (JTSP), and developing joint doctrine in conjunction with exercises and simulation capabilities.

These additional funding levels change the cycle and program costs. Due to ongoing nature of the JWFC mission, the cost to complete will be "not-applicable"

The Joint Staff

Exhibit 43 (IT-3) FIP Resources Requirements & Indefinite Delivery/Indefinite Quantity Contracts Lead Components

FY 1997 Budget Estimates (Dollars in Thousands)

- A. Contract Name: Joint Staff Automation for the Nineties (JSAN)
- B. Description of Contracts: Indefinite Delivery/Indefinite Quantity
- C. Contract Number: F19630-92-D-0001
- D. Estimated Contract Requirements by appropriation (\$000):

	<u>FY 1995</u>	<u>FY 1996</u>	FY 1997
Procurement	6.939	6.648	0
O & M	7.204	8.414	13.605
Other (specify)	0	0	0
Total	14.143	15.062	13.605

E. Contract Data:

- 1. Contract awarded to: CONTEL Federal Systems, Inc., changed to GTE Government Systems Corporation 20 November 1992 (via novation agreement).
- 2. Contract Award Date: 14 Nov 91 (affirmed by GSBCA, 20 November 1992)
- 3. Brand names and model numbers of primary hardware and software: IBM RISC System 6000 Model 2XX, Model 5XX, and Model 9XX series processor; however, this was changed to DEC Alpha processors for network servers and Intel-based 486 and Pentium workstations due to contractor (Contel then GTE)/Subcontractor (IBM then Loral) to deliver NSA evaluated/DIA certified Compartmented Mode Workstations (CMWs) that satisfied the Joint Staff requirements for multi-level security.
- 4. Contract duration (in years): 1 base year and 7 option years
- 5. Contract renewal option: Annual
- 6. Estimated value of contract: \$91.6 Million
- 7. Minimum obligation by FY:

FY 1993: \$5.0 Million FY 1994-2000: No minimum obligation by FY is required. As of the end of FY 1995, the estimated remaining minimum obligation for minimum contract quantities through 19 Nov 00 (end of contract) is \$1.5 Million.